

# Conducting an Agile Project

**CTO** Recommendations & Resources

GSA Tech Talks January 11, 2018



# **Topics**

- Identifying a Project Fit for an Agile Approach
- Performing Discovery and Technical Sprints
- Preparing for an Agile Kickoff and Sprint 0 Sessions
- Conducting Continuous Improvement through Inspection & Adaption

TECH.GSA.GOV: A Guide: New to Agile?



# Remember...Agile is a MINDSET.

"As a gardener, I like to compare agile to landscaping. Very few homeowners tear out the entire backyard and replant the whole thing at one shot, the way it's commonly done on the makeover shows on TV. Instead, most people landscape in stages, putting a lawn in first, along with a tree or two, later adding some bushes and shrubs, and finally planting the small perennials that will provide seasonal accents.

Software, like a garden, is a living, breathing entity that will grow over time."

~ Eric Wittman. 2014 ~



## Is Your Project FIT for an Agile Approach?

Before you begin, determine whether your project is **FIT FOR AN AGILE APPROACH**:



(SCOPE) Is the project LARGE AND COMPLEX (i.e. not all requirements are clear, or it is a new product / application that is unfamiliar, where requirements may change over time)?



(<u>SCHEDULE</u>) Are you trying to meet an aggressive timeline, with which you need to show **LIMITED FEATURES OR FUNCTIONALITY** (e.g. a pilot, or demo for a trade show)?



(<u>COST</u>) Are you focused on **MAXIMIZING BUSINESS VALUE** (i.e. improving the speed of delivery to better meet business needs, e.g. users unhappy with an existing system)?

TECH.GSA.GOV: How to Determine Projects Fit for Agile



# Is Your Project FIT for an Agile Approach?

Before you begin, determine whether your project is **FIT FOR AN AGILE APPROACH**:



Do you want to **BETTER ENGAGE CUSTOMERS / USERS** on an ongoing basis throughout development and **GARNER FEEDBACK MORE QUICKLY**?



Are you looking to increase **TRANSPARENCY** as you work with a **CROSS-FUNCTIONAL TEAM**?

THEN...

You are FIT for an Agile approach!

TECH.GSA.GOV: <u>Traditional Management Skills and Functions in an Agile Organization</u>



# **Changing Our Approach...**

"I've set the wedding date. I've not asked her out yet."
-- how software projects are managed.

~@venkat\_s ~





### **REQUIREMENTS**

High-level features? Success criteria?



### **USERS**

Cross-functional? Multi-regional?



### **DATA**

PII / PCI? Non-public website?



### **SECURITY & LEGAL**

FedRAMP-authorized? FISMA-compliant? System of Record? Open-source?



### **ENVIRONMENT**

Which platform? COTS solution? Testing?



**Technical Sprints** 

~ Define the Goal ~



# **Performing Discovery & Technical Sprints**

As you define the goal, **PREPARE FOR AN AGILE PROJECT KICK-OFF**:

- **REFINE THE PROBLEM STATEMENT.** (i.e. refine scope, create high-level wireframes, prioritize high-level features, conduct initial user interviews based on target audience)
- IDENTIFY <u>COMMITTED</u> SCRUM TEAM MEMBERS. (i.e. the Product Owner, Scrum Master, Core Development Team, Subject Matter Experts, and Key Stakeholders)
- SOLIDIFY THE ENVIRONMENTAL NEEDS. (i.e. request development and testing environments, identify system integration needs, hardware / software needs, contractor access)

TECH.GSA.GOV: <u>Discovery Phase Checklist</u>, <u>Proof Of Concept (PoC) Checklist</u> & <u>Collaboration Across Agile Teams</u>



### **Lessons Learned**

### **ADDITIONAL CONSIDERATIONS** as you prepare for an Agile Project Kick-off:

- TAILORED APPROACH. (i.e. remember Agile is <u>not</u> a methodology, Scrum is a <u>framework</u> that can be tailored to ensure focus on individuals and interactions, working software, customer collaboration, and better response to change)
- TRAINING. (i.e. plan for an introductory Agile / Scrum training during the Project Kick-off to ensure a base-level understanding for all parties, consider external Scrum training)
- **SPRINT 0.** (i.e. resolve any resource personnel, hardware and / or software, development environment, and access needs)

TECH.GSA.GOV: Projects, Popular Approaches to Agile Adoption & Steps You Can Take [Today] to Succeed in Agile Delivery



### **Agile Project Kick-off**

The Agile Project Kick-off should cover the high-level project overview and overarching strategy, project vision and scope, team roles and responsibilities, as well as the Agile approach and supporting ceremonies to be used. At the end of the Kick-off, the team should have an action plan for next steps.



Product Owner, Scrum Master, Scrum Team (Core Development), Subject Matter Experts (SMEs), and Key Stakeholders



Short, introductory Agile & Scrum training, discuss Key Stakeholder participation (i.e. Sprint Review / Demo), ensure JIRA access



High-level features, Major Milestones, Assumptions, Risks, Success Criteria, etc.



Ensure <u>ALL</u> stakeholders involved sign off on the Project Strategy, Vision, and Scope

TECH.GSA.GOV: Conducting an Agile Project Kick-off & Sprint O Session & Visibility & Status in an Agile Environment



## **Sprint 0 (& Beyond)**

The Sprint 0 can be held as either an extension of the Agile Project Kick-off, or as a separately scheduled meeting that focuses on the <u>needs of the Team</u>.



ONLY the Product Owner, Scrum Master, Scrum Team (Core Development), and Subject Matter Experts (SMES) as needed



Set 2-week sprint dates for planning, development, testing, & reporting, Schedule Scrum ceremonies



**The TEAM** should define how they will work together and create Team Norms

PREPARE FOR THE NEXT SPRINT

Focus on user story writing, estimation and storypointing, & prep the Sprint Backlog





# **Practice Makes Better...not Perfect!**

You don't "do" Agile, you **BECOME** Agile.



### **Inspect & Adapt**

### **GOING FORWARD**, focus on continuous improvement:



#### **CONSISTENT SCRUM CEREMONIES**

Use ceremonies effectively, **consistently** employ the Daily Stand-up, Sprint Planning and Grooming, and Sprint Retrospective



#### FIND NEW MEASURES OF SUCCESS

Implement new metrics that support Agile values, focus on business value and improving efficiency and productivity



#### **ENGAGE USERS & CAPTURE FEEDBACK**

Consistently review progress & capture feedback from users and Key Stakeholders to inform subsequent sprints



#### CONSISTENT COLLABORATION

Employ action items from retrospectives, build on project successes and lessons learned to improve future efforts

TECH.GSA.GOV: <u>Agile Meetings - Goals and Benefits</u> & <u>Measures of Success in an Agile Organization</u>



# Thank You!

For more on Conducting an Agile Project, check out the following: TECH.GSA.GOV/Guides, AgileAlliance.org, ScrumAlliance.org, & Scrum.org